



February Newsletter: Celebrating 50 Years of Cardiovascular and Pulmonary Section

Spotlight on Specialization and Board Certification in Cardiopulmonary Physical Therapy

This month, as we continue celebrating the 50th anniversary of the Academy of Cardiovascular and Pulmonary Physical Therapy (CVP PT), we're focusing on the development of specialization and Board Certification in Cardiopulmonary Physical Therapy. We'll take a journey through its history, highlight key milestones, and celebrate 40 years of Cardiovascular and Pulmonary (CVP) specialization. In this issue, we will spotlight Linda Crane and Meryl Cohen, two of the first Board-Certified Clinical Specialists in Cardiopulmonary Physical Therapy. Scot Irwin, also one of the first Board-Certified Clinical specialists, was the first president of the CVP Section and so was featured in last month's newsletter.

The Journey to Specialization: How Cardiopulmonary Practice Paved the Way

The path to specialization in physical therapy officially began in 1976 when the House of Delegates approved the concept and established a task force to develop the essentials for creating specialty areas. That same year, Scot Irwin, as chair of the CVP Section and a member of the task force, led discussions on the need for specialization in CVP PT. Recognizing the importance of defining advanced CVP practice, the group embarked on years of work to establish competencies for specialization.

In 1978, Cardiopulmonary was recognized as one of four specialty areas, and the APTA formed the Board for Certification of Advanced Clinical Competence (BCACC). This board was tasked with certifying PTs who demonstrated advanced knowledge and skills. By 1981, the CVP Specialty Council was approved, and in 1984, the BCACC and the Specialty Council published the Advanced Clinical Competencies in Cardiopulmonary PT, paving the way for specialty examinations.

The first three members of the CVP Specialty Council, Pam Catlin, Ray Blessy, and Cyndi Zadai worked tirelessly to develop and administer the



the exam. Their efforts ensured a rigorous and credible process for certification.

Candidates for Board certification were required to submit an extensive application to the BCACC before being deemed eligible to sit for the 2-day exam. This application included evidence of:

- a minimum of 10,000 hours of direct cardiopulmonary patient care,
- administration of an original executed cardiopulmonary education module that included, amongst other items, objectives, content, evaluation, and assessment
- original, completed cardiopulmonary research
- Cardiopulmonary program administration, including amongst other activities, program organization, staffing, mission and goals.
- Certification in American Heart Association Advanced Cardiac Life Support

In 1985, the BCACC became the American Board of Physical Therapy Specialties (ABPTS). That same year, the first exam was administered resulting in Board Certification of 3 Cardiopulmonary Clinical Specialists. Linda Crane, Meryl Cohen, and Scot Irwin



Photo: First Board Certified Cardiopulmonary Clinical Specialists at recognition ceremony, 1985

were recognized at the National APTA meeting in New Orleans where the energy in the room was electric, as over 400 attendees celebrated this achievement. As one member of the audience said, “we never knew if anyone would ever want to become a specialist or sit for an exam”. Many in attendance were members of the early task force on Specialization in Physical Therapy and were leaders in the field. They were the visionaries responsible for “seeing” the vital role clinical specialization *with certification* would play in helping to move the profession forward.

Since then, CVP specialization has grown significantly, with 549 individuals certified as of 2024. The path to certification remains rigorous, achievable through self-study or participation in a residency program. Today, there are 13 accredited CVP residency programs across 12 states.

Linda Crane, PhD, PT; Board Certified Cardiopulmonary Clinical Specialist



The following bio was compiled from information provided by friends, colleagues, and classmates of Dr. Crane. She passed away in 1999 after losing her battle with breast cancer. We honor her memory and have tried to accurately record her extensive involvement and leadership in CVP PT.

Linda Crane graduated from Ithaca College in 1973 with a BS in Physical Therapy and went on to earn an advanced MS from Emory University in 1977, focusing on cardiopulmonary competencies. She began her career at Hartford Hospital, where she established a cardiopulmonary service while also teaching part-time at the University of Connecticut. Over the years, Linda held academic positions at several universities, including the University of Alabama -Birmingham, the University of New England, and the University of Miami, where she served until her untimely passing in 1999.

A trailblazer in pulmonary care for infants and children, Linda published extensively and conducted workshops nationwide. She was also a natural leader, serving as the fourth president of the CVP Section and

chair of the CVP Specialty Council. Her dedication to advancing clinical specialization and validating competencies laid a foundation that continues to shape CVP PT today.

Despite personal challenges, including losing her home in Hurricane Andrew and battling breast cancer while pursuing her PhD, Linda's resilience was unwavering. She received her PhD in 1999, just one month before her passing. Her legacy lives on through the Linda Crane Award and the annual Linda Crane Lecture at the Combined Sections Meeting.

When did you first get involved in the Cardiopulmonary Section/Academy of CV&P

It is not clear what inspired Dr. Crane to become interested in CVP PT, but we do know that she demonstrated a proclivity to association leadership. Given that the section was created around the same time that she received her PT degree, and that specialization was in its early development, it seems reasonable that she would want to become involved in the Section.

Who were some of your mentors

Marilyn Gossman, PT PhD, appears to have been one of Linda's mentors. They crossed paths at the University of Alabama-Birmingham. Additional mentors most likely included pulmonologists, neonatologists, cardiologists, and CVP PT colleagues.

How have you practiced cardiopulmonary (what types of settings) and what are your proudest achievements?

In addition to her practice in Hartford Hospital in Connecticut, we know that Linda maintained clinical practice in Alabama, Maine, and in Miami

at Jackson Memorial Hospital. While in Miami her practice focused on treating patients with comorbid high level spinal cord injury and pulmonary compromise, and neonates with pulmonary impairment. As mentioned earlier, she taught in several academic PT programs.

Her proudest moments might have included:

- becoming a Board Certified Cardiopulmonary Clinical Specialist,
- receiving her PhD
- and maybe most of all, inspiring her entry-level and graduate students to discover the importance of and passion for CVP PT practice.

What is your advice to give someone to keep updated in our field, and what worked for you?

Stay current, read the literature, contribute to the literature, practice from the evidence whenever possible, network with colleagues, be a mentor and be mentored, be active in your professional association, and always behave with integrity. Linda Crane lived all of these and was one of our most respected professional leaders.

What is the most important issue for CVP Academy to address in the future?

We know that Linda was spirited, passionate, and often modeled moral courage. She would likely encourage the Academy and our colleagues to advocate for healthful behaviors and against unhealthy behaviors. On several occasions in the 70's and 80's she tirelessly tried to solicit support in the House of Delegates to help educate the public about the health consequences of smoking. Fast forward to this decade, she would likely be encouraging the APTA to educate the public, especially the youth, about the efficacy and health consequences of Vaping and e-cigarettes.

Linda would likely be thrilled with the creation of Clinical Residencies and would support their expansion and growth. The work she did to advance Board Certification as evidence of advanced clinical practice was limited by the lack of CVP PT mentors; Residency helps to fill that void.

Linda was a pioneer in helping to document CVP PT competencies, both entry level and specialty. Continued support, revision, and dissemination of validated competencies for PT school curriculum by the CVP Academy would likely be efforts that Linda Crane would embrace and encourage.

Meryl Cohen, DPT, MS, FAPTA

Board Certified Cardiopulmonary Clinical Specialist, Emeritus



Meryl Cohen began her journey in physical therapy at Boston University and quickly recognized her passion for cardiopulmonary care. Early in her career, she worked in hospitals in Washington DC, Virginia, and Florida. Her advanced Master of Science degree from Medical College of Virginia focused on all phases of cardiac rehabilitation. From 1981 to 1996, she led cardiac rehabilitation physical therapy at Massachusetts

General Hospital (MGH). It was while she was working at MGH (1985) that she became one of the first Board-Certified Cardiopulmonary Clinical Specialists. She went on to receive her transitional Doctor of Physical Therapy degree from the MGH Institute of Health Professions (IHP).

Meryl has had a long career of guest teaching in the Cardiopulmonary curriculum at several PT programs including MGH IHP, University of Colorado, and NOVA Southeastern University. She later joined the faculty at University of Miami, where she developed the University of Miami – Jackson Memorial Hospital CVP PT Residency Program and continues to serve as an Associate Professor.

Throughout her career, she co-authored a textbook, contributed to leading PT publications, and mentored countless clinicians and students. She has had opportunities to conduct workshops around the country and overseas in South Africa and Venezuela.

When did you first get involved in the Cardiopulmonary Section/Academy of CVP

Upon graduation from PT school, I very quickly recognized my limitations in working with high-risk patients with cardiac diseases. This led me to attend a weeklong course for PTs at Highland View Hospital in Ohio. The course, “Specialized Exercise Training”, inspired me to network with other therapists with similar interests. Through my membership in the APTA, I discovered the existence of a group of local clinicians in the Washington DC area who were interested in cardiopulmonary patient care. I met with the group several times; Colleen Kigin was one of the clinicians in this group. She introduced me to the newly formed CP Section and attended the National APTA meeting in Washington DC in 1976. My involvement continues to this day.

Who were some of your mentors

There were so many! And they were across disciplines and backgrounds.

- **Patients “mentored”** me along the way; the idea of safely mobilizing and strengthening acutely ill high risk cardiac patients was not only new to PT, but a new way only a few physicians were trying to manage their patients. Despite the “evidence” indicating safety, there was much resistance amongst most physicians and nurses. A few, including Bill Dec MD and Chip Gold MD, supported my efforts and helped guide my understanding of heart disease as we “mentored” each other as to what was safe and effective treatment as each high-risk patient provided his /her own set of challenges.
- Networking with my PT colleagues across the country further contributed to my understanding of PT for these high risk cardiac and pulmonary patients. **We all “mentored” one another**, benefitting from our accumulated clinical experiences as we each chose to further challenge the oxygen delivery system of patients who were already living with oxygen delivery system challenges. Throughout my career, Kate Grimes, PT CCS and Colleen Kigin PT, importantly impacted my growth and development as a clinician.
- Colleagues and advisors, especially Roberta Newton, PT PhD, and Carol Davis DPT EdD, have helped me learn how to critically review the literature and to critically reflect on the soundness of my process as a teacher, and mentor.

How have you practiced cardiopulmonary (what types of settings) and what are your proudest achievements?

Most of my early clinical practice was with cardiac patients, primarily medically managed critically ill hospitalized cardiac patients. Over the years practice included working with and development of outpatient cardiac and pulmonary rehab programs. More recently I have been in an Academic role, teaching entry level students and Residents, conducting small research projects, and providing clinical care and consultation and mentorship to local clinicians regarding best CVP PT practice.

I am most proud of:

- The patient care that I delivered throughout my career, culminating in the development of a cardiopulmonary rehabilitation clinical program, which, in addition to direct patient care, serves as a venue for clinical research, and health provider training.
- Clinical teaching including having the opportunity to
 - To inspire clinicians to learn more about cardiopulmonary PT practice, seek specialization and advanced study, and become clinical and academic teachers themselves.
 - Use my position to help clinicians translate the evidence into best clinical practice
- Academic teaching, including having the opportunity to
 - inspire entry level students to be willing to make mistakes in the classroom, ask questions, and simultaneously embrace critical thinking.
 - Be recognized by the Faculty Senate of the University of Miami with the Outstanding Teacher Award (2021)
- Recognition by my profession as a Catherine Worthingham Fellow of the APTA (2014)

What is your advice to give someone to keep updated in our field, and what worked for you?

Keep up to date with the literature including our Clinical Practice Guidelines, translate the literature into realistic and clinically relevant practice, and network and collaborate with colleagues in and outside of PT. I believe these are essential when pursuing best practice.

Many of us did not have PT mentors to look to for guidance. We had to creatively combine our knowledge and skills of the movement system with the skill set of those in related fields eg physicians, critical care nurses. Additionally, we managed to network with the small group of PTs across the country, who had similar clinical interests in CVP patient care. This “network” enabled opportunities for us to problem solve, consult with one another, and learn from each other’s successes and challenges. Attendance at national conferences of the American Heart Association and the American College of Cardiology were especially helpful.

With over 500 Board Certified Cardiopulmonary Clinical Specialists, the internet, artificial intelligence, and inter-disciplinary team-based patient care, the opportunities for clinicians to keep updated is promising.

What is the most important issue for CVP Academy to address in the future?

Along with providing a mechanism for CVP PTs to network, it will be important for the CVP Academy to help:

- Support clinicians in staying updated on advances in technology and medical-surgical procedures.
- Advocate for high-quality care that emphasizes the value and outcomes of CVP PT.

- Encourage research that provides practical outcomes for patient care.
- Inspire educators to prepare students for future challenges in CVP practice.

Stay tuned for more historical perspectives and celebrations in future newsletters. Here's to another 40 years of advancing specialization in Cardiopulmonary Physical Therapy!

CHART: Number of newly Certified CVP Specialists by year (ABPTS website 2024)

